

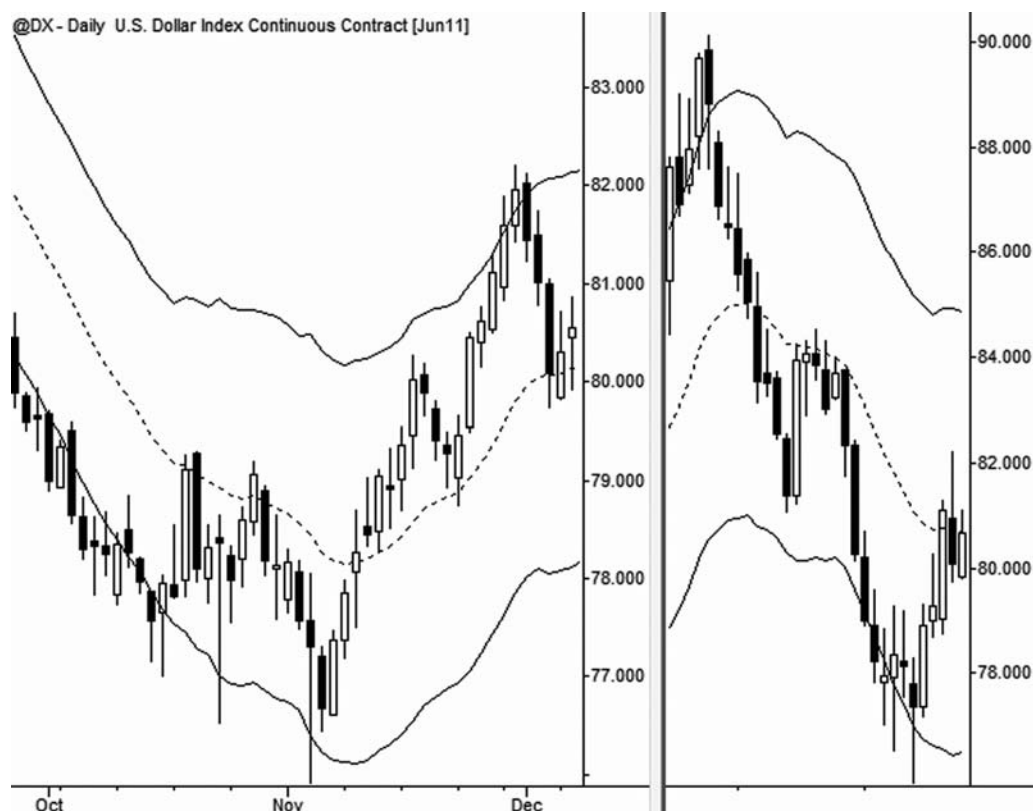
**FIGURE 3.14** Schematic of the Three Pushes Pattern Showing Underlying Structure

## A DEEPER LOOK AT PULLBACKS: THE QUINTESSENTIAL TREND TRADING PATTERN

Imagine that you wanted to trade a trend in the most efficient manner possible. If you knew the future—when and where the trend would begin and end—it would be simple: buy at the beginning of the uptrend and sell at the end; short at the beginning of a downtrend and cover at the end. Since working time machines are hard to come by, we have to find another plan. The next best solution might be to use the pullbacks to position for the next trend leg. In other words, buy into the pullbacks in uptrends and short into the pullbacks (bounces) in downtrends. Even if we are buying in an uptrend, we would still prefer to buy at relatively low prices; using the pullbacks allows us to do this. Furthermore, it is possible to monitor some of the characteristics of the developing pullbacks to get some clues as to where the trend might end. Chapter 6 demonstrates several specific patterns and plans for trading pullbacks, but let's begin here by considering some of the important points that all pullbacks, and trades around them, have in common.

### Characteristics of Winning Pullbacks

Pullbacks are contratrend movements, meaning that, in an uptrend, the pullbacks are actually lower time frame downtrends and, in the case of pullbacks in downtrends, the lower time frame will be in an uptrend. One important principle of market behavior is that trends that run counter to the higher time frame trend tend to be weaker and tend to abort suddenly as the higher time frame trend reasserts itself. This is useful from two perspectives: First, trading pullbacks makes sense because they offer excellent trade locations (i.e., buying relatively cheap in an uptrend or selling relatively high in a downtrend) with a good probability of success. Second, understanding this principle is important because it can filter out low-probability trades—if you enter a pullback on your trading time



**FIGURE 3.15** Conflicting Information from the Daily and Weekly Chart of the U.S. Dollar Index Futures

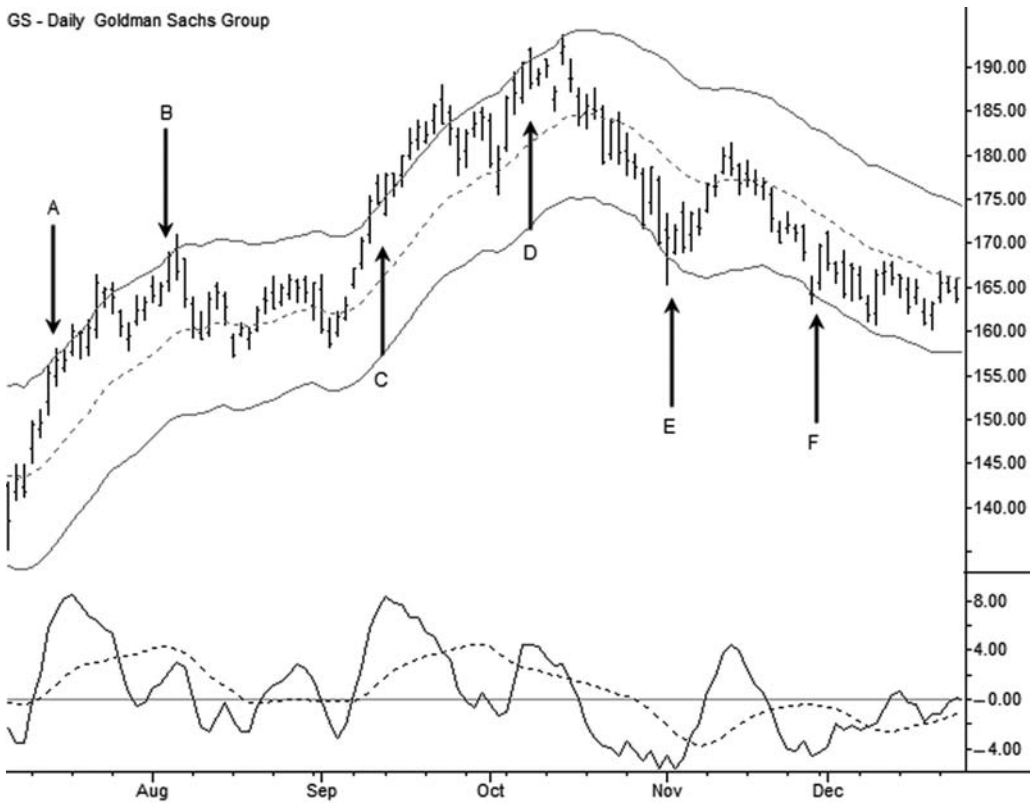
frame that is actually contratrend to the higher time frame market structure, this trade will have a much lower probability of success.

An example will help to clarify this. Figure 3.15 shows what appears to be a pullback in a good uptrend on the daily U.S. Dollar Index futures chart in the left pane. This is the second pullback off a potential trend change in early November; the market has rallied to the upper Keltner channel, and has pulled back approximately to the moving average. All other things being equal, this would normally be a good potential long trade. However, a look at the weekly chart (right pane) shows that this time frame is actually in a strong downtrend, and has only pulled back to its moving average. Seen in this context, the uptrend on the daily chart is likely to terminate suddenly as the weekly chart reasserts control and the downtrend on that time frame resumes.

**Follows Good Momentum or Impulse** When trading pullbacks in a trend, it is helpful to make sure the market is actually trending. One of the best ways to separate out the suboptimal trading environments is to trade only pullbacks that are preceded by significant momentum in the direction of the trend. There are many ways to quantify

this, but simple, visual chart analysis can be very useful. The highest-probability trades will follow large moves relative to previous swings on the chart. Again, we are into the territory of subjective analysis, but this is a legitimate skill that can be developed with experience and exposure to many patterns. The question the trader needs to ask is: “Am I seeing a move here that should have continuation?” The most important thing to keep in mind is that we are looking for sharp impulse moves and for significant momentum moves that indicate there is an imbalance in the market that should resolve with another move in the same direction. It is also possible to quantify this condition with the MACD or another momentum indicator—look for the indicator to register a significant new high or low (relative to its recent history), and trade only pullbacks following that condition.

Figure 3.16 shows an example of this kind of trading in action. For each of the points marked on the chart, compare the price action of the market to the action of the fast line (the solid line) of the modified MACD. At the point marked A on the chart, the MACD has registered a significant new high relative to its recent history (not visible to the left of the chart). This would suggest that a trader could look to buy any weakness to position long for another drive to the upside; the small pullback beginning six bars after A offered



**FIGURE 3.16** Trading Momentum in GS, December 2009

just such an opportunity. At the point marked B, the market made a new high but the momentum indicator did not. This is a *momentum divergence* (more on that in the next subsection) and suggests that long trades should not be entered on the next pullback. In this case, the market did go to new highs, but only after chopping sideways for nearly a month; being tied up in this trade for that length of time would not have been a productive use of financial or mental capital. At C, the market makes a new high, as does the MACD—buy the next pullback. At D, the new high in the market is accompanied by a momentum divergence, so a trader would be well advised to avoid buying the following pullback. In this case, the sell-off marked E spiked the MACD to a new extreme low reading, now suggesting that the next bounce would be a good shorting opportunity. This was true, and the higher MACD reading relative to the new price low at F would have been a warning to not short into the next bounce.

**Does Not Follow a Momentum Divergence** A corollary to the preceding is that the best pullback trades will not come after a *momentum divergence*. There are both objective and subjective elements to this evaluation, but the simple MACD analysis in the preceding example is a good place to start. If we precisely define the ways in which we will measure momentum, it is possible to define some clear guidelines for trades to be taken and avoided based on the existing momentum conditions. Length of swing analysis provides some additional insight into the momentum behind each leg of the trend: Larger swings (vertical distance on chart) have stronger momentum than smaller swings, but the rate of the trend (price/time, visible as slope on the chart) is also important.

It is also possible that managing existing positions may require a slightly different mind-set than initiating new positions. For instance, a strong enough divergence could warn you not to increase risk or not to initiate new positions into the next pullback, but you might still be justified in holding a partial position that was initiated earlier at better prices. This is the kind of question that must be decided in advance, and your trading plan should encompass all the possibilities for managing existing positions as well as initiating new exposures.

**Location in Trend** It is an axiom in technical analysis that the first entry in a trend is the best entry, but this is an example of the kind of hindsight analysis that must be avoided. All this really says is that if a market goes up, the best place to get in was at the beginning of the move—not a particularly helpful piece of knowledge. However, this concept *is* useful from a slightly different perspective; with each successive trend leg we should be slightly more suspicious of the move. It is hard to justify assuming the same kind of risk on the fourth or fifth legs as on the first or second, but it is also important to remember that markets *do* have outsized trend moves, and some trends go on far longer than anyone would have thought possible. It is rare, but a market can have 10 trend legs in the same direction without a significant pullback; most of these later legs will be generating momentum divergences and then rolling over those divergences. This is also a good reminder why you do not want to add to losing countertrend trades. Even if an



extended trend move is a one in a thousand event, if it happens the one time you are being stubborn and adding to a trade as it grinds against you, that one time can put you out of business. Competent traders manage risks so that no single trade can ever take them out of the game.

**Retracement Percentage** There is valuable information in the character and size of the pullbacks in a trend; a strong trend will tend to generate smaller pullbacks, relative to the with-trend legs, than a weaker trend. While we can measure and quantify these pullbacks in various ways, there is enough noise in the market that exact measurements and ratios are not particularly useful. This is another tool that that may be best synthesized into a quasi-discretionary framework.

A good rule of thumb is to expect retracements to terminate at about 50 percent of the preceding setup leg, plus or minus a very large margin of error. In practice, one good rule might be to look for terminations somewhere in the 25 to 75 percent range, but not to be surprised to see terminations either shallower or deeper. You basically have two broad choices for trading pullbacks: either enter at predetermined retracement levels with very large stops (which will mandate relatively small position sizes and has bad implications for reward/risk ratios) or wait for lower time frame and/or price action confirmation that the pullback has reached a termination. We will explore the second option in considerable depth in Chapters 6 through 10.

One special case of shallow retracements is more common on intraday charts than on higher time frames: sometimes an extremely strong trend is unable to pull back at all; the absence of any clear trend pattern is a pattern in itself. Prices may either move higher in a series of tight, stair-step trading ranges, or they will press against the upper channel and slide along that band as the market grinds higher. These can be treacherous patterns to trade. While these patterns do point to exceptionally strong imbalances and also to very strong trends, the lack of significant pullbacks makes it difficult to position in the trend at advantageous prices. In addition, these types of trends often feature the occasional large spike against the trend, most likely driven by anxious traders exiting trades near the edge of shallow pullbacks. These spikes can make it difficult to precisely define risk in with-trend entries. Figure 3.17 shows an example of this trending pattern in Baidu.com (Nasdaq: BIDU) in February through April 2010. Notice that a trader waiting for a pullback would have been frustrated, as none materialized; the market simply continued higher.

**Symmetry and Lower Time Frame Considerations** A pullback is usually a period of lower volatility and action in which the market pauses and consolidates the strength (or weakness, in the case of a downtrend) of the trend legs. This is one of the characteristics of good pullbacks: they are generally periods of lower activity compared to trend legs. One of the most reliable tools for defining lower activity is to monitor price action on lower time frames, where we would expect to see less conviction in the direction of the trend on that time frame. Remember, the lower time frame trend is



**FIGURE 3.17** A Strong Trend in BIDU Holds the Stock Tight against the Upper Keltner Channel

*countertrend* to the prevailing trend on the trading time frame, so we should be on guard for that lower time frame trend to abort in the direction of the trading time frame's trend. Lower time frame ranges should be smaller in most pullbacks, and there should not be as much conviction in taking liquidity from the book. In addition, the best pullbacks are often more or less symmetrical on the trading time frame, though it is not unusual to see the occasional spike outside the confines of the pattern. These spikes can, in fact, offer attractive entry points for trades, but the majority of the action should be confined within clearly defined boundaries.

Compare Figure 3.18, which shows retracements in JPMorgan Chase & Company (NYSE: JPM) during the latter half of 2009, with Figure 3.19, which highlights retracements in U.S. Steel Corporation (NYSE: X) during the spring of the same year. Notice that the retracements in X are much more consistent: they are at approximately the same angle and the same depth, and they are generally clean, symmetrical geometric patterns. In contrast, the retracements in JPM are much more erratic. They cover very different angles, are less predictable in depth, and one, into early October, features a dramatic drop that would have shaken most longs out of the market. You would be correct in



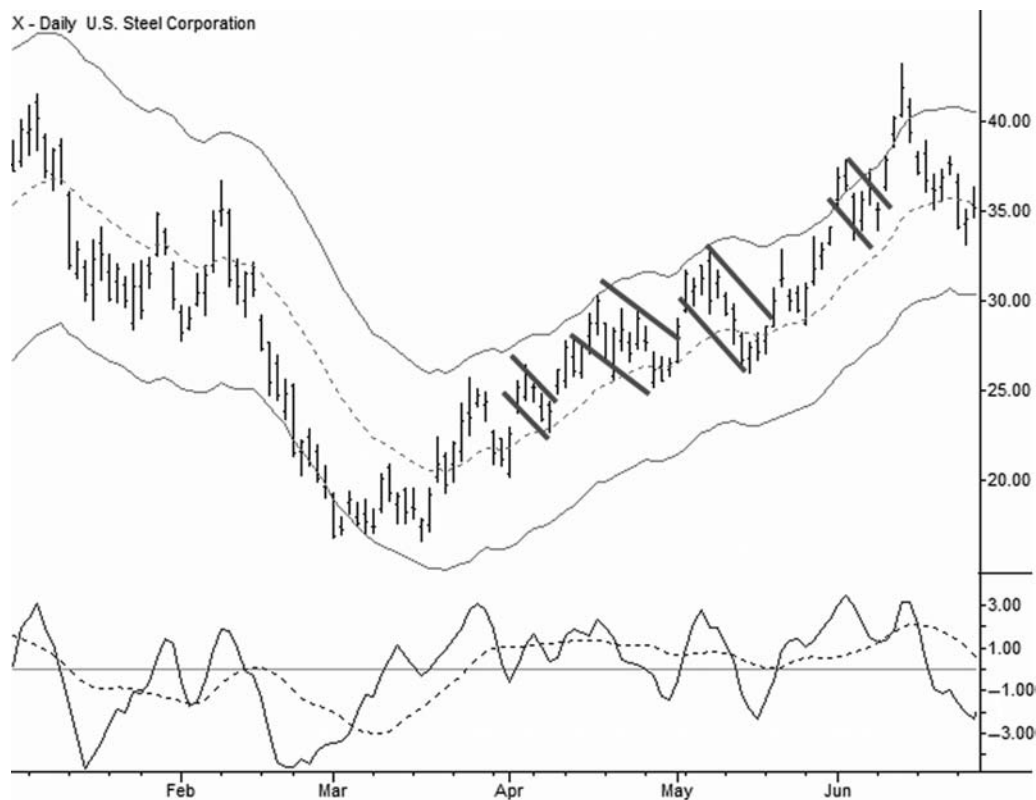
**FIGURE 3.18** Erratic Pullbacks in JPM, Late 2009

surmising that the patterns in X would have been much more tradable, and that they probably offered better opportunity for most trend traders.

### Common Characteristics of Failed Pullbacks

As important as it is to understand the patterns associated with successful pullbacks, it is probably equally important to understand the patterns that hint at impending failure. Understanding how patterns fail lets traders look for warning signs to exit losing trades, sometimes taking a smaller than expected loss. In addition, some very good trades are driven by traders trapped in failed patterns. This is especially common with failed breakouts, which will be covered in the next chapter, but some traders look for trades to set up around failed pullbacks as well. In general, pullback trades fail in one of three ways:

1. There is *no momentum* out of the pullback, and the market goes into a more or less flat trading range somewhere in the level of the pullback.



**FIGURE 3.19** More Consistent Pullbacks in X, Mid-2009

2. The pullback *fails dramatically* as sharp, countertrend momentum emerges. The challenge is to distinguish between this scenario and the more common complex consolidation.
3. The next trend leg emerges out of the pullback, but it *fails in the neighborhood of the previous swing* (i.e., the high of the setup leg in an uptrend or the low of the setup leg in a downtrend).

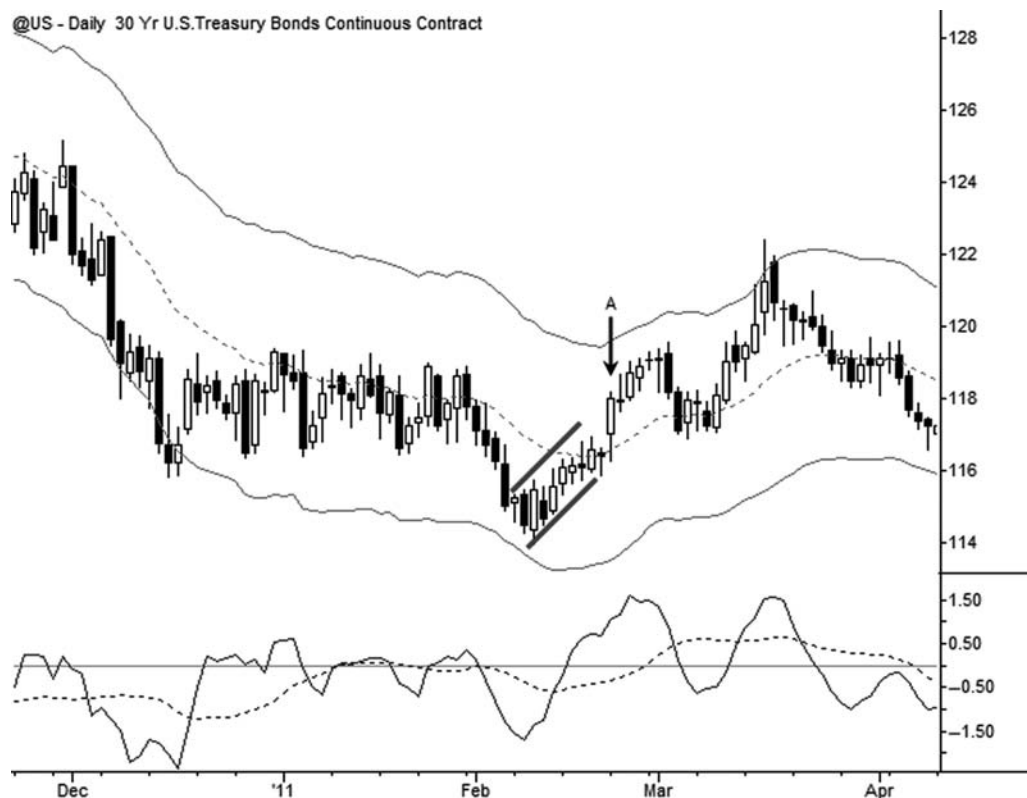
**Flat Pullback** One of the most common pullback failure patterns occurs when the market begins what looks like a good pullback but then there is simply no move out of that pullback. Instead, the market goes into a flat range, indicating that buyers and sellers are in relative balance. Trading in this new range is usually a bad idea since price action will be random and not driven by any real order flow. Also, breakouts from this new range are treacherous, with the potential for fake-outs in either direction. In most cases, the best course of action is to recognize the pattern once it has developed, book a small loss or gain on the trade, and move on to other opportunities. Figure 3.20 shows an example of a pullback in AAPL that failed to continue the trend and instead transitioned



**FIGURE 3.20** A Pullback in APPL That Failed by Transitioning to a Flat Trading Range

into a sideways range. Though it is difficult to set a precise point at which a trader should have recognized that the pullback was not working as expected, it should have been obvious no later than four or five bars after the point marked A on the chart. In this case, the pullback eventually failed dramatically as sharp downside momentum came into the market, but it could just as easily have resolved to the upside. The point is that this pattern indicates that whatever edge existed in the pullback is now gone.

**Sharp Countertrend Momentum as Pullback Is Violated** The previous example showed a case where a pullback failed via sharp contratrend momentum after first going into a sideways range. However, the market is not always so polite. Some of the most dangerous pullback failures, at least in terms of the possibility of creating large losses, occur when the pullback simply fails sharply by breaking to the “wrong side.” Pullbacks that were anticipated to have been continuation patterns in uptrends may fail through sharp breakdowns, and vice versa. These are the patterns that make risk management based solely on pattern geometry difficult—how far away do you put the stop? No matter where you might think it should go, there will, in some subset of these patterns, be spikes to that level and beyond. Figure 3.21 shows an example of a continuation

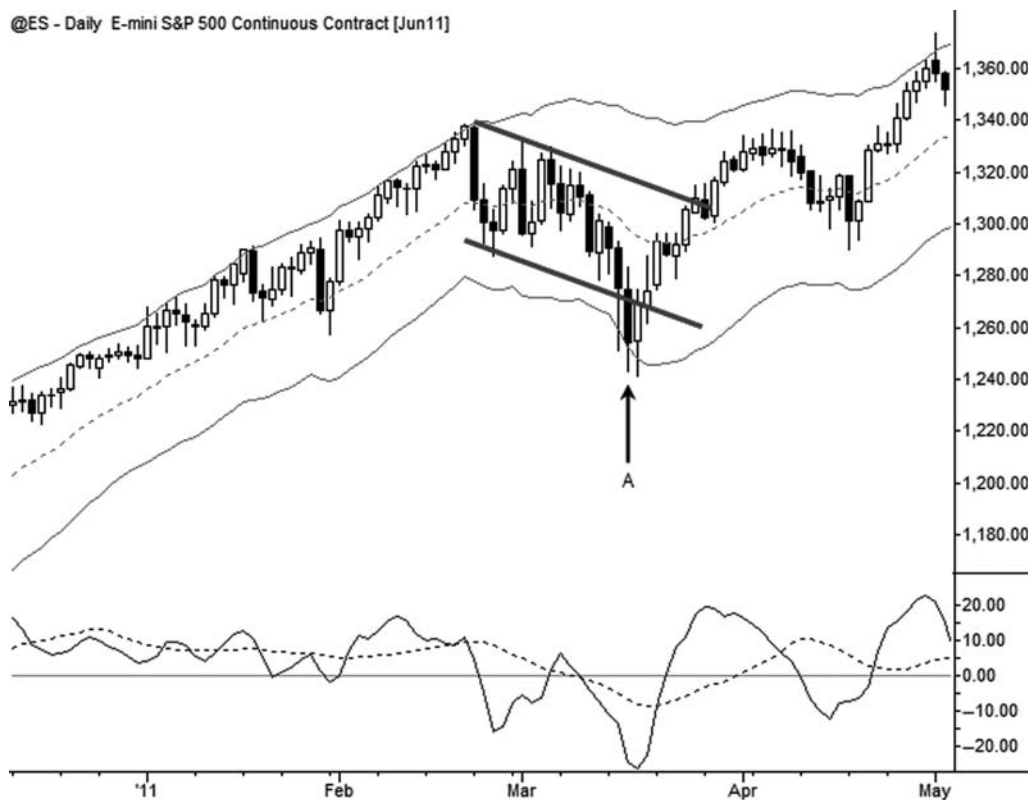


**FIGURE 3.21** A Pullback in 30-Year Treasury Bond Futures That Failed via Sharp Momentum

pattern in the 30-year Treasury bond futures that seemed to have everything going for it: the market had consolidated on support for two months, the breakdown of that support was fairly clean and had good momentum, and the market started to consolidate under that previous support. This is an excellent pattern on which to base a short trade, but in this case it was not to be. At the point marked A, buyers swept the market up through the top of the pullback, back above support, and it did not look back.

It absolutely is necessary to limit your risk on these patterns, because many of them will not return to your entry price after they fail. In fact, if the pattern was a truly excellent setup, there may be many traders trapped on the wrong side of the market, and this pressure can sometimes create a long-term inflection point in a trend. Imagine shorting at the very bottom of a turn into an uptrend, and shorting more as the market rallies, only to see a full-fledged uptrend emerge. Traders will inevitably be caught in situations like this; it is the task of risk management to make sure that they become normal, planned-for losses and not outright disasters.

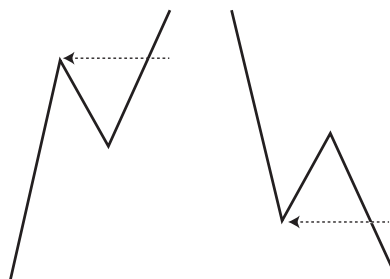
However, there is another important pattern to be aware of. It is sometimes possible to turn trapped traders to our advantage, as many excellent trades are driven by traders trapped either into or out of the market. In the aforementioned example, if you



**FIGURE 3.22** A Failure to Break Down Out of a Pullback in the S&P Futures Sets Up a Good With-Trend Entry

have continued shorting into the new uptrend, eventually you would have been trapped on the wrong side of the market with an outsized loss and forced to throw in the towel. This, obviously, is not good. However, take a look at Figure 3.22, which shows a complex consolidation in an uptrend in the E-mini S&P 500 Futures. At the point marked A, the consolidation had failed: the pattern was broken by two large candles under the bottom of the pattern, with a close far underneath at A. If you were an aggressive short, it might even have been reasonable to initiate a short on this bar, but look carefully at what happened next. There was no momentum and no selling conviction below the level. Within two days, the market was solidly back above the consolidation, went on to take out the highs, and put in another trend leg over the next several weeks. This is an extremely important pattern for pullback traders, who are always trying to find the ideal combination of trade location and probability. Usually, buying as low as possible means buying when prices are declining, but this type of failure at the bottom of the consolidation allows an entry at low prices that is also aligned with short-term momentum. This is an outstanding entry pattern for pullback traders.





**FIGURE 3.23** Profit Targets for Pullbacks In Uptrends and Downtrends

**Failure around Previous Pivot** When trading pullbacks, it is unrealistic to assume that every pullback will result in a new trend leg equal to the setup leg or that they will give rise to trends that continue for many more legs. This, of course, is the best-case outcome, but it is far more common to find pullback trades that give opportunities for smaller profits. More consistent results will come from taking at least partial profits at a more conservative profit target; the pivot high or low (in an uptrend or a downtrend, respectively) of the setup leg is an ideal target and should be considered the first, most conservative profit target for any pullback trade. Figure 3.23 shows this pullback target schematically for both uptrends and downtrends.

The third pullback failure occurs around this profit target—either before, at, or just beyond it. It is not necessary to examine each possibility in detail, because they are all conceptually the same. The market reaches the neighborhood of the first profit target and simply is not able to trade very far beyond that target. For traders taking partial profits here, these patterns are not even actually failures; the first target was reached. The important point is that traders should always be on guard for potential failure at this area, particularly in the area of previous pivots (e.g., the high of the setup trend leg preceding the pullback).

There are many possibilities for trade management, depending on the trader's personality and the details of the exact trading plan. Many traders prefer to exit some portion of their pullback trades at these targets, with the idea that they will be able to endure a failure at the target without a substantial loss. In fact, by booking partial profits and reducing the position size, many times it is possible to walk away from this kind of failure with a profit on the overall trade. Figure 3.24 shows an example of a failure at the first profit target in the GBPUSD. A sustained downtrend made a complex pullback (note also the failure entry at the top of the pullback, similar to Figure 3.22 inverted), which broke down and failed to extend beyond the previous swing low. A trader on guard for this failure could certainly have booked a profit on the trade, even though the actual downswing was much smaller than previous downswings.

There are several issues to consider here. First, of the three possibilities (failure inside, precisely at, or beyond the setup leg's extreme), the one that actually trades beyond the previous pivot to make a marginal new high or low before failing is the most treacherous. The reason is that there are likely to be more trapped trend traders, and more traders



**FIGURE 3.24** A Pullback in the GBPUSD Fails Near the Trend Extreme

who will be aggressive about adjusting their positions as the market retreats from that extreme; this can lead to very sharp countertrend momentum on these failures. The second issue is a mechanical one. If you intend to take profits around these previous swings, spend some time considering how you will do this. What percentage of the position will you exit? Will you do it by bidding or offering at the previous extreme, or will you wait to see the market fail? (Note that waiting for the failure can result in substantial slippage at times.) If you do exit part of the position, will you ever add it back? As you consider the theory and structure of markets, also begin to consider them within the framework of an applied trading plan.

## TREND ANALYSIS

There are many tools in technical analysis for identifying and analyzing trends. The choice of which to use will depend on many factors: your personality, your trading style, what kind of trend you want to identify, where (in terms of the age of the trend) you want